AMENDMENTS TO THE CLAIMS

In the set of claims within the Application, please amend or retain each claim as hereinafter indicated.

1. (Currently Amended) A method for scatter correction during simultaneous bi-plane imaging, said method comprising the steps of:

(a) generating a first x-ray flux in a first imaging plane;

(b) generating a first image readout;

(c) digitally sampling a first scatter signal from said first x-ray flux in a second imaging plane;

(d) generating a first compensation signal for said first scatter signal;

(e) generating a second x-ray flux in said second imaging plane;

(f) generating a second image readout;

(g) compensating for scatter in said second image readout with said first compensation signal;

(h) activating a first scatter correction algorithm in response to said second image readout and said first compensation signal;

(i) generating a first image display from said first scatter correction algorithm; and

(j) periodically updating said first image display through stopping a current exposure in said second imaging plane and reading a scatter image update resulting from an exposure in said first plane.

2. (Currently Amended) The method of claim 1, wherein ~~generating a first compensation signal further comprises~~ step (d) includes the sub-steps of:

activating a first scatter image formation algorithm;

generating said first compensation signal; and

storing said first compensation signal in a first scatter correction memory.

3. (Cancelled)

4. (Currently Amended) The method of claim 1, said method further comprising the steps of:

generating a third x-ray flux in said first imaging plane;

generating a third image readout;

generating a fourth x-ray flux in said second imaging plane;

generating a fourth image readout;

digitally sampling a second scatter signal from said fourth x-ray flux in said first imaging plane; and

generating a second compensation signal for said second scatter signal.

5. (Currently Amended) The method of claim 4, said method further comprising the steps of:

generating a second digital scatter readout;

generating a fifth x-ray flux in said first imaging plane;

generating a fifth image readout; and

compensating for scatter in said fifth image readout with said second compensation signal.

6-7. (Cancelled)

8. (Currently Amended) The method of claim [[6]] 5, said method further comprising the steps of:

activating a second scatter correction algorithm in response to said fifth image readout and said second compensation signal; and

generating a second image display from said second scatter correction algorithm.

9. (Currently Amended) A method for scatter correction during simultaneous bi-plane imaging, said method comprising the steps of:

generating a first x-ray flux in a first imaging plane;

generating a first image readout;

digitally sampling a first scatter signal from said first x-ray flux in a second imaging plane;

generating a first compensation signal for said first scatter signal;

generating a second x-ray flux in said second imaging plane;

generating a second image readout;

compensating for scatter in said second image readout with said first compensation signal;

activating a first scatter correction algorithm in response to said second image readout and said first compensation signal;

generating a first image display from said first scatter correction algorithm; and

periodically updating said first image display through stopping a current exposure in said second imaging plane and reading a scatter image update resulting from an exposure in said first plane.

10. (Currently Amended) The method of claim 9, said method further comprising the steps of:

generating a third x-ray flux in said first imaging plane; and

generating a third image readout.

11. (Currently Amended) The method of claim 10, said method further comprising the steps of:

generating a fourth x-ray flux in said second imaging plane;

generating a fourth image readout;

digitally sampling a second scatter signal from said fourth x-ray flux in said first imaging plane; and

generating a second compensation signal for said [[first]] second scatter signal.

12. (Currently Amended) The method of claim 11, said method further comprising the steps of:

generating a second digital scatter readout;

generating a fifth x-ray flux in said first imaging plane;

generating a fifth image readout; and

compensating for scatter in said fifth image readout with said second compensation signal.

13-14. (Cancelled)

15. (Currently Amended) The method of claim [[13]] 12, said method further comprising the steps of:

activating a second scatter correction algorithm in response to said fifth image readout and said second compensation signal; and

generating a second image display from said second scatter correction algorithm.

16-20. (Cancelled)

21. (Currently Amended) A scanning system ~~including~~ comprising:

a gantry[[,]];

a first x-ray source coupled to said gantry, said first x-ray source adapted to generate a first x-ray flux and a first plane scatter signal[[,]];

a second x-ray source coupled to said gantry, said second x-ray source adapted to generate a second x-ray flux and a second plane scatter signal[[,]];

a first x-ray detector system coupled to said gantry, said first x-ray detector system adapted to generate a first detector signal in response to said first x-ray flux and further adapted to generate a first scatter signal in response to said second plane scatter signal[[,]];

a second x-ray detector system coupled to said gantry, said second x-ray detector system adapted to generate a second detector signal in response to said second x-ray flux and further adapted to generate a second scatter signal in response to said first plane scatter signal[[,]]; and ~~the scanning system comprising:~~

a host computer adapted to receive the first detector signal, the second detector signal, the first scatter signal, and the second scatter signal; [[and]]

wherein said host computer is operable to generate an x-ray image data file ~~generated by said host computer~~ as a function of [[the]] said first detector signal, [[the]] said second detector signal, [[the]] said first scatter signal, and [[the]] said second scatter signal that is representative of internal portions of an object, said x-ray image data file ~~comprising~~ including (i) first digital data representative of internal portions of said object when exposed to [[the]] said first x-ray source, (ii) second digital data representative of internal portions of said object when

exposed to [[the]] said second x-ray source substantially simultaneously with exposure to [[the]] said first x-ray source, wherein [[the]] said first x-ray source is displaced from [[the]] said second x-ray source, said first digital data is modified to compensate for scattered radiation from [[the]] said second x-ray source, and said second digital data is modified to compensate for scattered radiation from [[the]] said first x-ray source, and (iii) third digital data representative of a characteristic of said object.

22. (Cancelled)

23. (Currently Amended) The ~~data file~~ scanning system of claim 21, wherein said object is a person and said third digital data is representative of at least one of the person's name, identification number, or physical condition.

24. (Currently Amended) The ~~data file~~ scanning system of claim 23, wherein said first and second digital data [[is]] are generated when [[the]] said first and second x-ray sources are located at least three positions relative to ~~the patient~~ said person, and wherein [[the]] said at least three positions define an arc.

25. (Currently Amended) The ~~data file~~ scanning system of claim 24, wherein said arc has a fixed radius.

26. (Currently Amended) The ~~data file~~ scanning system of claim 23, wherein said first and second digital data [[is]] are generated when [[the]] said first and second x-ray sources are located at least three positions relative to ~~the patient~~ said person, and wherein [[the]] said at least three positions are located along a straight line.

27. (Cancelled)

28. (Currently Amended) The ~~data file~~ scanning system of claim 23, wherein at least one image is of the person's chest cavity.

29. (Currently Amended) A method of generating revenue, said method comprising the steps of:

(a) generating a first digital data representative of internal portions of an object when exposed to a first x-ray source;

(b) generating a second digital data representative of internal portions of an object when exposed to a second x-ray source substantially simultaneously with exposure to said first x-ray source, wherein said first digital data has been modified to compensate for scattered radiation from said second x-ray source and said second digital data has been modified to compensate for scattered radiation from said first x-ray source;

(c) generating a third digital data representative of a characteristic of said object; and

(d) generating a request for a payment of money based upon at least said third digital data.

30. (Currently Amended) The method of claim 29, wherein said first and second digital data [[is]] are generated by respective digital x-ray detectors and [[is]] are representative of at least one image of said object.

31. (Previously Presented) The method of claim 30, wherein said object is a person and said third digital data is representative of at least one of the person's name, identification number, or physical condition.

32. (Currently Amended) The method of claim 31, wherein ~~generating said first and second digital data includes~~ steps (a) and (b) include at least [[a]] one step of exposing a person's chest cavity to said first and second x-ray sources.

33. (Currently Amended) The method of claim 29, wherein ~~generating said first and second digital data includes~~ steps (a) and (b) include the sub-steps of:

generating first scatter data representative of radiation scattered from said first x-ray source when said second x-ray source is not radiating x-rays;

generating second scatter data representative of radiation scattered from said second x-ray source when said first x-ray source is not radiating x-rays;

performing said compensation of said first digital data based on said second scatter data; and

performing said compensation of said second digital data based on said first scatter data.

34. (Currently Amended) The method of claim 32, wherein ~~generating said first and second digital data includes~~ steps (a) and (b) include the sub-steps of:

generating first scatter data representative of radiation scattered from said first x-ray source when said second x-ray source is not radiating x-rays;

generating second scatter data representative of radiation scattered from said second x-ray source when said first x-ray source is not radiating x-rays;

performing said compensation of said first digital data based on said second scatter data; and

performing said compensation of said second digital data based on said first scatter data.

35. (Currently Amended) The method of claim 34, said method further comprising a step of transmitting said first, second, and third digital data over a computer network.

36. (Previously Presented) The method of claim 35, wherein said computer network is the Internet.

37. (Original) The method of claim 36, wherein said computer network is one of a wide-area computer network or a local-area computer network.

38. (Currently Amended) The method of claim 29, said method further comprising the step of storing said first, second, and third digital data in reference to said request for payment and data representative of payments associated with said request for payment.

39. (Currently Amended) The method of claim 38, said method further comprising the step of determining a service charge associated with said request for payment.

40. (Currently Amended) A system for imaging internal portions of an object, said imaging system comprising:

a first ~~imaging system~~ x-ray source;

a second ~~imaging system~~ x-ray source displaced from said first ~~imaging system~~ x-ray source;

a first digital detector supported relative to said first ~~imaging system~~ x-ray source to generate first digital data representative of the object when exposed to [[a]] said first ~~imaging system~~ x-ray source;

a second digital detector supported relative to said second ~~imaging system~~ x-ray source to generate second digital data representative of [[the]] said object when exposed to [[a]] said second ~~imaging system~~ x-ray source substantially simultaneously with exposure to said first ~~imaging system~~ x-ray source, wherein said first digital detector selectively generates first scatter data representative of radiation scattered from said first ~~imaging system~~ x-ray source when said second ~~imaging system~~ x-ray source is not radiating ~~radiation~~ x-rays and second scatter data representative of radiation scattered from said second ~~imaging system~~ x-ray source when said first ~~imaging system~~ x-ray source is not radiating ~~imaging system radiation~~ x-rays; and

a digital data processor coupled to said first and second digital detectors to modify said first digital data with said second scatter data to compensate for scattered radiation from said second ~~imaging system~~ x-ray source and to modify said second digital data with said first scatter data to compensate for scattered radiation from said first ~~imaging system~~ x-ray source, wherein said data processor is further configured to store third digital data representative of a characteristic of [[the]] said object.

41. (Cancelled)

42. (Currently Amended) The imaging system of claim 40, wherein said characteristic is one of an object type, an object name, an object location, an object destination, an object identification number, an object owner, an object source, or an object shape.

43. (Currently Amended) The imaging system of claim 40, said imaging system further comprising a human viewable display for generating an image associated with said modified first and second digital data.

44. (Currently Amended) The imaging system of claim 43, said imaging system further comprising:

a conveyor for supporting an object[[,]]; [[and]]

wherein [[the]] said object is one of baggage, packages, liquid containers, or envelopes.

45. (Currently Amended) The imaging system of claim 43, wherein [[the]] said object comprises a vehicle, and said ~~imaging system~~ x-ray sources and said digital detectors are supported relative to a vehicle imaging location.

46. (Currently Amended) The imaging system of claim 43, wherein said data processor is further configured to store third digital data representative of a characteristic of [[the]] said object, and wherein [[the]] said object is a person.

47. (Currently Amended) The imaging system of claim 46, wherein said human viewable display is configured to further generate alphanumeric or graphical images representative of said characteristic simultaneously with the image.

48. (Currently Amended) The imaging system of claim 47, wherein said characteristic is one of a name, age, weight, identification number, location, view, or physical condition of [[the]] said person.

49. (Currently Amended) The imaging system of claim 48, said imaging system further comprising a gantry for moving said ~~imaging system~~ x-ray sources relative to [[the]] said person.

50. (Currently Amended) The imaging system of claim 49, said imaging system further comprising a network interface coupled to said processor for communicating first, second, and third digital data over a network.